

3Växel System requirements

Compliance with the system requirements in this document is required to get full functionality, stability and high quality in the 3Växel service. Please also note that older operating systems and hardware are gradually phased out.

3Växel app in smartphone and tablet

The 3Växel app is available for iOS and Android in smartphones and tablets and may be downloaded from Google Play and App Store. For iOS, the two latest, official iOS-versions are supported. For Android, the app supports the three latest official Android-versions on the hardware families Samsung Galaxy S10/S20, Sony Xperia XZ2/XZ3 and Google Pixel 2/3/4. We recommend the latest versions of iOS and Android when new devices are purchased. The life time for older versions are expected to be relatively short.

3Växel web in computer

The 3Växel web (3vaxel.tre.se) for e g PBX admin and settings supports the following web versions:

- Mozilla Firefox 54 and later
 - Safari 10 and later
 - Google Chrome 60 and later
 - Microsoft Edge 80 or later
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3Växel Softphone and IP-desk phones (IP-telephony)

The 3Växel Softphone in computer and IP-desk phones use IP-telephony (telephony via IP / Internet-access).

General system requirements for 3Växel IP-telephony

- Please reserve at least 100 kbit/ s in both directions per call. (G.711 64 kbit/s + IP overhead)
- The corporate network shall be opened for traffic as specified in table further down in this document.

General system requirements for 3Växel Softphone (in computer)

- The 3Växel Softphone client is downloaded from the 3Växel web (3vaxel.tre.se).
- The Softphone is installed locally on each computer. Thin clients are not supported.
- 30 MB hard disk memory
- For ACD- and attendant view, at least 1024x768 screen resolution is required.
- A minimum Softphone-version is required to be able to login, please see tre.se. Please upgrade if login is rejected because of too low version.



System requirements for 3Växel Softphone in PC

- Windows 10
- USB headsets with latest firmware version from **Jabra** (verified with UC-versions of Evolve 75, PRO 930, PRO 9470 or from **Poly (Plantronics)** or from **Sennheiser**. Please check manufacturer's web page for supported models and latest firmware.
- Outlook plugin only supports PC and Office 365 or Outlook 2016 and later

System requirements for 3Växel Softphone in Mac (Intel)

- The two latest, official operating system versions of MacOS.
- USB headsets with latest firmware version from **Poly (Plantronics)** or from **Sennheiser**. Please check manufacturer's web page for supported models and latest firmware.

The corporate network shall be open for the following traffic:

Source	Destination IP/host	Protocol	Port	Application	Protocol
Customer NW	80.251.192.32/27*	HTTP	80	Web	TCP
Customer NW	80.251.192.32/27*	HTTPS	443	All applications	TCP
Customer NW	80.251.192.32/27*	HTTPS	9443	SNOM IP-telephones	TCP
Customer NW	80.251.192.32/27*	SIP/TLS	5061	All SIP-units	TCP
Customer NW	80.251.192.32/27*	SIP/UDP	5060	All SIP-units	UDP
Customer NW	80.251.192.32/27*	SIP/TCP	5060	All SIP-units	TCP
Customer NW	80.251.192.32/27*	STUN	5060	All SIP-units	UDP
Customer NW	80.251.192.32/27*	RTP/RTCP	49152-65535	All SIP-units	UDP
Customer NW	80.251.192.32/27*	NTP	123	IP-telephones and IP-DECT	UDP

*or 80.251.192.41--59

**or 80.251.192.40—58

Internet capacity for 3Växel

Internet capacity shall be reserved for 3Växel services. This is of highest importance if the network is used for IP-telephony (computer softphones and/or IP desk phones). We recommend that other services using high bandwidth, e g video or file transfer are not used over the IP-connection used for 3Växel. Internet connection via a foreign office shall not be used.

Sound files in 3Växel

It is possible to upload sound files on 3Växel web to be used for e g welcome greetings, queue messages, e t c.



Input audio file specification at upload:

Encoding: PCM (uncompressed)

Sampling frequency: 8kHz

Audio file type: .wav or .aiff

The uploaded file will be converted to A-Law, 8kHz mono format. It may take up to a minute before the prompt is converted and stored, ready for traffic.

Depending on the capabilities of your browser, recorded prompts will be available for play or audio file download for review purposes.

For editing of sound files, we recommend the Audacity application which may be downloaded from the Internet, free of charge.

